

### Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the application.

#### Listing of Claims

Claim 1. (Currently amended) [[:]] Multi-color rotary printing machine, comprising:

- ~~in which~~ one printing plate support ~~(1)~~ each is assigned to the colors to be transferred onto the a printing plate, ~~whereby~~ said printing plate support ~~(1)~~ ~~supports~~ supporting a printing plate ~~(6)~~ and
- said printing plate support ~~(1)~~ ~~can be~~ being attached to a mandrel or a cylinder ~~(5)~~ of ~~a~~ the rotary printing machine in order to transfer ~~the~~ a print image onto ~~the~~ a print substrate[[,]]; and
- ~~whereby the rotary printing machine has~~ register devices ~~(6, 7, 8)~~ that determine the positions of the printing plates ~~(6)~~ with respect to one another, and
- ~~whereby the register devices (6, 7, 8) comprise~~ including sensors ~~(3)~~ that determine the positions of the printing plate support ~~(1)~~ in the printing machine and
- ~~whereby the register devices (6, 7, 8) provide~~ providing information regarding the positions of the printing plate support ~~(1)~~ before, at the start of, or

during ~~the~~ a print process ~~with the help of~~ in  
conjunction with the sensors ~~(3)~~,

- based on which control signals ~~can be~~ are provided,
- ~~whereby~~ the register devices ~~(6, 7, 8)~~ comprise  
including a control device ~~(7)~~ using with which it is  
~~possible to generate~~ control signals are generated based  
on the positions of the printing plate support ~~(1)~~  
determined by the sensors ~~(3)~~ and ~~it is possible to~~  
~~control the~~ with which drives of the mandrels or the  
print cylinders ~~(5)~~ are controllable using said control  
signals in such a manner that ~~the~~ a phase position of the  
mandrels or the print cylinders ~~(5)~~ in relation to one  
another ~~can be~~ is changed[[,]]
- and ~~the~~ a register accuracy of the print increases,
- ~~and whereby~~ each printing plate support ~~(1)~~ contains  
including at least one information carrier ~~(2)~~ from which  
information ~~can be~~ is removed using a the sensor ~~(3)~~,  
~~whereby~~ the information that ~~can be~~ is read out being  
automatically ~~is~~ suitable for determining the relative  
position of the printing plate support on the mandrel or  
on the print cylinder ~~(5)~~ of a ~~the~~ rotary printing  
machine, and

~~characterized in~~

- ~~that~~ the information carrier (2) ~~is being~~ arranged outside the printing mandrel (6) and
- ~~that the information carrier (2) is arranged~~ between the print image (6) and ~~the~~ an edge of the printing plate support that is turned toward ~~the~~ a front end of the mandrel or of the print cylinder (5).

Claim 2. (Currently amended) [[:]] ~~Multi-color~~ The multi-color rotary printing machine ~~pursuant~~ according to the ~~afere-~~ mentioned claim ~~characterized in that~~ 1, wherein the information carrier (2) has an oblong [[,]] ~~preferably rectangular~~ shape ~~whereby its~~ and a long side that is essentially aligned in ~~the~~ a peripheral direction of the printing plate support.

Claim 3. (Currently amended) [[:]] ~~Printing plate support~~ ~~pursuant~~ The multi-color rotary printing machine according to claim 1, ~~characterized in that~~ wherein the information carrier (2) surrounds ~~the~~ a periphery of the mandrel or of the cylinder (5) of the printing machine.

Claim 4. (Currently amended) [[:]] ~~Printing plate support~~ ~~pursuant~~ The multi-color rotary printing machine according to claim 1, ~~characterized in that~~ wherein the information stored on the information carrier ~~can be read out~~ is readable optically, magnetically, or electromagnetically.

Claim 5. (Currently amended) [[:]] ~~Printing plate support~~  
~~pursuant~~ The multi-color rotary printing machine according to  
claim 1, ~~characterized in that~~ wherein the information carrier  
~~(2) comprises~~ includes a magnetic tape or a sequence of  
magnetizable individual elements.

Claim 6. (Currently amended) [[:]] Process for setting up a multi-  
color rotary printing machine before and at the start of the a  
print process, comprising:

- ~~in which~~ assigning one printing plate support ~~(1)~~ each  
~~is assigned~~ to the colors to be transferred onto the a  
print substrate, ~~whereby~~ said printing plate support ~~(1)~~  
~~supports~~ supporting a printing plate ~~(6)~~;
- ~~and in which~~ attaching the printing plate supports ~~(1)~~  
~~are attached~~ to mandrels or cylinders ~~(5)~~ of a the rotary  
printing machine in order to transfer the a print image  
onto the print substrate and;
- ~~in which~~ determining with register devices ~~(6, 7, 8)~~  
~~determine the a~~ position of the printing plates ~~(6)~~ with  
respect to one another,
- ~~whereby~~ the register devices ~~(6, 7, 8)~~ comprise  
including sensors ~~(3)~~ that determine ~~the~~ positions of the  
printing plate support ~~(1)~~ in the printing machine and

- ~~whereby~~ the register devices ~~(6, 7, 8)~~ provide providing information based on the positions of the printing plate supports ~~(1)~~ determined by the sensors ~~(3)~~,
- ~~whereby~~ with control signals ~~can be being~~ derived based on ~~this~~ the information and
- ~~whereby~~ the register devices ~~(6, 7, 8)~~ comprise including a control device ~~(7)~~ ~~using which it is possible to generate~~ that generates control signals based on the positions of the printing plate support ~~(1)~~ determined by the sensors ~~(3)~~;
- ~~and whereby the control device uses these~~ using the control signals to control ~~the~~ drives of the mandrels or of the print cylinders ~~(5)~~ in such a manner that ~~the~~ a phase position of the mandrels or of the print cylinders ~~(5)~~ in relation to one another ~~can be~~ is changed[[,]]
- so as to increase ~~the~~ a register accuracy of the print,
- ~~and whereby the~~ printing plate supports ~~(1)~~ ~~are used~~ ~~that each contain~~ having at least one information carrier ~~(2)~~ from which information ~~can be~~ is removed using a the sensor ~~(3)~~[[,]]; and
- ~~and whereby this~~ reading the information ~~is~~ read out automatically and ~~used for determining the~~ using the information to determine a relative position of the

printing plate support on the mandrel or on the print cylinder (5) of a the rotary printing machine, characterized in that

- with printing plates are being used ~~in which~~ such that the information carrier (2) is arranged outside the printing plate (6) and
- ~~whereby the information carrier (2) is arranged between~~ the print image (6) and ~~the~~ an edge of the printing plate support that is turned toward ~~the~~ a front end of the mandrel or of the print cylinder (5).

Claim 7. (Currently amended) [[:]] ~~Process pursuant~~ The process according to claim 6, ~~characterized in that~~ wherein during the ~~adjustment~~ change of the relative phase position of the mandrels or the print cylinders, the printing plate supports (1) rest in relation to the mandrels or print cylinders (5) assigned to them.

Claim 8. (Currently amended) [[:]] ~~Process pursuant~~ The process according to claim 7, ~~characterized in that a~~ wherein the multi-color rotary printing machine is used ~~in which~~ that comprises the one printing plate support (1) each ~~is~~ assigned to the colors to be transferred onto the printing plate, ~~whereby~~ said printing plate support (1) ~~supports a~~ supporting the printing plate (6) and

- said printing plate support ~~(1) can be~~ being attached to a the mandrel or a the cylinder ~~(5)~~ of a the rotary printing machine in order to transfer the print image onto the print substrate,
- whereby the rotary printing machine ~~has~~ having the register devices ~~(6, 7, 8)~~ that determine the positions of the printing plates ~~(6)~~ with respect to one another and
- whereby the register devices ~~(6, 7, 8) comprise~~ having the sensors ~~(3)~~ that determine the positions of the printing plate support ~~(1)~~ in the printing machine and
- whereby the register devices ~~(6, 7, 8) provide~~ providing the information regarding the positions of the printing plate support ~~(1)~~ before, at the start of, or during the print process ~~with the help of~~ in conjunction with the sensors ~~(3)~~,
- based on which the control signals ~~can be~~ are provided,
- whereby the register devices ~~(6, 7, 8) comprise a~~ having the control device ~~(7) using which it is possible to generate~~ that generates the control signals based on the positions of the printing plate support ~~(1)~~ determined by the sensors ~~(3)~~ and ~~it is possible to control~~ that controls the drives of the mandrels or of the print cylinders ~~(5)~~ using said control signals in

such a manner that the phase position of the mandrels or  
of the print cylinders ~~(5)~~ in relation to one another can  
~~be~~ is changed[[,]]

- and the register accuracy of the print increases,  
- ~~and whereby~~ with each of the printing plate support ~~(1)~~  
~~contains~~ supports containing the at least one information  
carrier ~~(2)~~ from which the information ~~can be~~ is removed  
using a the sensor ~~(3)~~, whereby and with the information  
that ~~can be~~ is read out automatically ~~is~~ being suitable  
for determining the relative position of the printing  
plate support on the mandrel or on the print cylinder ~~(5)~~  
of a the rotary printing machine, and  
~~characterized in~~

- ~~that~~ with the information carrier ~~(2)~~ is being arranged  
outside the printing mandrel ~~(6)~~ and ~~that the information~~  
~~carrier (2) is arranged~~ between the print image ~~(6)~~ and  
the edge of the printing plate support that is turned  
toward the front end of the mandrel or of the print  
cylinder ~~(5)~~.

Claim 9. (Currently amended) [[:]] ~~Printing plate support pursuant~~  
The multi-color rotary printing machine according to claim 2,  
~~characterized in that~~ wherein the information carrier ~~(2)~~



surrounds ~~the~~ a periphery of the mandrel or of the cylinder ~~(5)~~  
of the printing machine.

Claim 10. (Currently amended) ~~[[:]] Printing plate support~~  
~~pursuant~~ The multi-color rotary printing machine according to  
claim 2, ~~characterized in that~~ wherein the information stored on  
the information carrier ~~can be~~ is read out optically,  
magnetically, or electromagnetically.

Claim 11. (Currently amended) ~~[[:]] Printing plate support~~  
~~pursuant~~ The multi-color rotary printing machine according to  
claim 3, ~~characterized in that~~ wherein the information stored on  
the information carrier ~~can be~~ is read out optically,  
magnetically, or electromagnetically.

Claim 12. (Currently amended) ~~[[:]] Printing plate support~~  
~~pursuant~~ The multi-color rotary printing machine according to  
claim 2, ~~characterized in that~~ wherein the information carrier  
~~(2) comprises~~ includes a magnetic tape or a sequence of  
magnetizable individual elements.

Claim 13. (Currently amended) ~~[[:]] Printing plate support~~  
~~pursuant~~ The multi-color rotary printing machine according to  
claim 3, ~~characterized in that~~ wherein the information carrier

~~(2) comprises~~ includes a magnetic tape or a sequence of magnetizable individual elements.

Claim 14. (Currently amended) ~~[[:]] Printing plate support pursuant~~ The multi-color rotary printing machine according to claim 4, ~~characterized in that~~ wherein the information carrier ~~(2) comprises~~ includes a magnetic tape or a sequence of magnetizable individual elements.

15. (New) The multi-color rotary printing machine according to claim 2, wherein the information carrier shape is rectangular.

16. (New) A multi-color rotary printing machine, comprising:

a printing plate support that supports a printing plate and that is assigned to colors to be transferred onto the printing plate, the printing plate support being attached to a mandrel or a cylinder of the machine in order to transfer a print image onto a print substrate during a printing process; and

register devices that determine positions of the printing plates with respect to one another, the register devices including sensors that determine positions of the printing plate support in the machine and the register devices providing information regarding the positions of the printing plate support before, at the start of, or during the printing process in conjunction with the sensors based on which control signals are

provided, the register devices including a control device that generates control signals based on the positions of the printing plate support determined by the sensors and with which drives of the mandrels or the print cylinders are controllable using said control signals such that a phase position of the mandrels or the print cylinders in relation to one another is changed and a register accuracy of the print increases,

each printing plate support including at least one information carrier from which information is removed using the sensor, the information carrier having a magnetic tape or a sequence of magnetizable individual elements, with the information that is removed being readable optically, magnetically, or electromagnetically and being automatically adapted for determining the relative position of the printing plate support on the mandrel or on the print cylinder, and

the information carrier being arranged outside the printing mandrel and between the print image and an edge of the printing plate support that is turned toward a front end of the mandrel or of the print cylinder.

17. (New) The multi-color rotary printing machine according to claim 16, wherein the information carrier has a rectangular shape with a long side that is substantially aligned in a peripheral direction of the printing plate support.